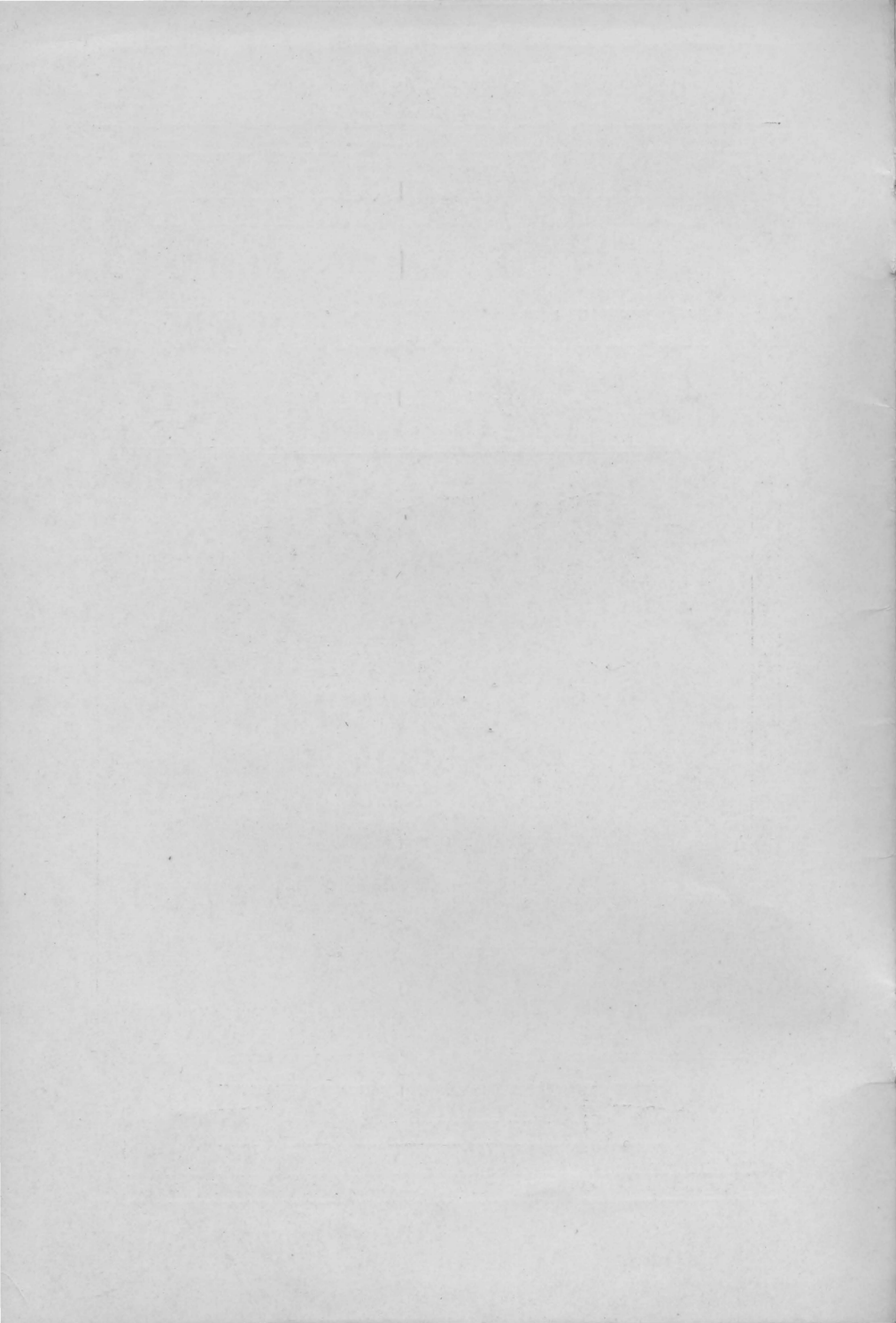


FARMERS' WEEK ACTIVITIES  
IN  
ANIMAL HUSBANDRY

*February 12th—17th, 1917*



*Compliments of*  
**THE ROUND-UP CLUB**



NEW YORK STATE  
COLLEGE OF AGRICULTURE

*at*

CORNELL UNIVERSITY



ALBERT R. MANN, *Acting Dean*



DEPARTMENT OF ANIMAL HUSBANDRY

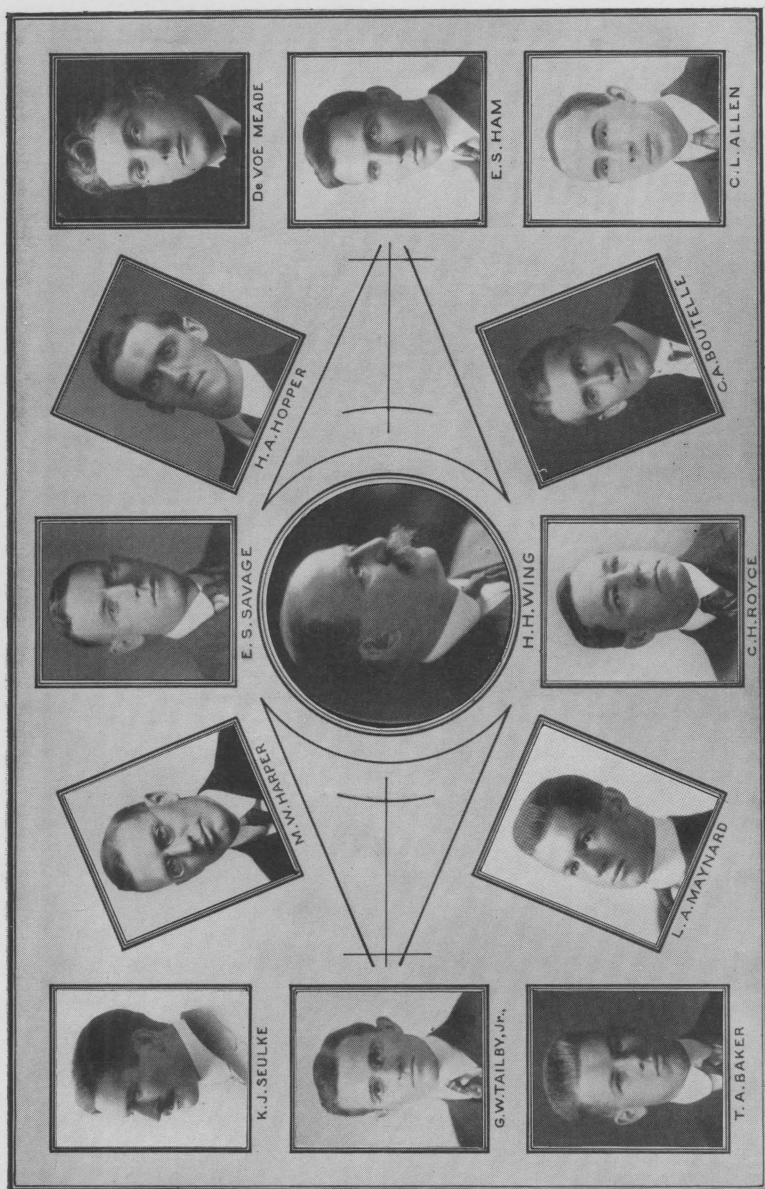
H. H. WING, <i>Professor</i>	K. J. SEULKE, <i>Instructor</i>
M. W. HARPER, <i>Professor</i>	DeVOE MEADE, <i>Instructor</i>
E. S. SAVAGE, <i>Professor</i>	G. W. TAILBY, Jr., <i>Stockman and Instructor</i>
H. A. HOPPER, <i>Professor (Extension)</i>	T. A. BAKER, <i>Instructor</i>
L. A. MAYNARD, <i>Assistant Professor</i>	E. S. HAM, <i>Instructor</i>
C. H. ROYCE, <i>Ass't Professor (Extension)</i>	G. W. TAILBY, <i>Sup't Horses</i>
C. A. BOUTELLE, <i>Ass't Professor (Extension)</i>	C. L. ALLEN, <i>Assistant</i>



ROUND-UP CLUB


FARMERS' WEEK COMMITTEE

	C. L. DUNHAM, Jr., '17, <i>Chairman</i>
D. U. DUNHAM, '17	D. C. HITCHCOCK, Sp.
W. B. EASTMAN, '17	J. F. HAM, '18
O. N. EATON, '17	C. S. DENTON, '18
	T. R. ADAMS, S. C.




The Instructing Staff of the Department of Animal Husbandry





## THE DEVELOPMENT OF THE DEPARTMENT OF ANIMAL HUSBANDRY



FROM the opening of the College of Agriculture in 1868, and up till 1888, all the instruction given in Agriculture was grouped together in a single department known as the Department of Agriculture. The first attempt at specialization was made in 1888, when L. H. Bailey was appointed Professor of Horticulture. In 1891 H. H. Wing was appointed assistant professor of Dairy Husbandry and Animal Industry.

Up to 1903, when L. H. Bailey became Director of the College, the Department of Agriculture included what is now known as the Departments of Animal Husbandry, Dairy Industry, Poultry Husbandry, Farm Crops, and Farm Practice, but at that time the Departments of Animal Industry and Dairy Husbandry were separated and made distinct departments with Professor Wing at the head of the Department of Animal Husbandry. Then Professor Wing was able to devote his time to the care and breeding of dairy cattle instead of giving instruction in all lines of Animal Husbandry as he had done up to this time.

It will be noted that in the early days of the Department of Agriculture, the terms "Dairy Husbandry" and "Animal Industry" were used while now the terms have been transposed and the departments are known as "Dairy Industry" and "Animal Husbandry."

Professor Harper, who has charge of the instruction in the breeding, care, and management of horses, came to the Department in 1905. In 1906, E. S. Savage was appointed instructor. He now has charge of research and instruction in feeds and feeding. K. J. Seulke was added to the Department in 1914, to give instruction in courses relating to sheep, swine, beef cattle and meat products.

In connection with his work with dairy cattle, Pro-

fessor Wing has charge of the testing work for the advanced registry in New York State which is conducted in the name of the Federal Experiment Station at Cornell University. This work is quite important. During the year May, 1915, to May, 1916, records of 3852 Holstein cows have been supervised, besides records of other dairy breeds. There is an average of about 85 testers out doing this work.

Until 1914, the Department of Animal Husbandry was housed in what is now the Farm Management Building, and until 1911, the cow barns were on the site of the Home Economics Building. The present cow barns and horse barn were completed in 1910 and 1912 respectively. The new Judging Pavilion was completed in 1914. Since the completion of these buildings the number of courses of instruction given and the personnel of the staff have been increased.

The extension work of the Department has become more important in recent years and at present four men of the staff give their time solely to extension work.

### THE ROUND-UP CLUB

Coincident with the rapid expansion and development of the College of Agriculture came the formation of a number of clubs in the various departments within the College. In 1907 the Round-Up Club was formed for students especially interested in Animal Husbandry, at the home of Professor Wing. The peculiarly appropriate name of the club was given to it by Mrs. Wing.

For several years Professor Harper gave his time to the club and helped make it what it is today. At the present time, Mr. Ham is responsible for its regular meetings which occur on Monday night of each week.

The important feature of the club is that it furnishes a common ground for the meeting of the faculty and students so that all may become better acquainted and may discuss subjects of special interest to the students. Such personal touch is hardly possible in the classroom since the classes have become so large.

The Round-Up Club has no formal organization and no special requirements of its members except that

when there is some work for the members to do, such as the work of the club in preparation for and during the activities of Farmers' Week, it is expected that they will do all they can to make these activities a success. Anyone may become a member and it is felt that those who do the most for the club get the most in return.

During the first term, men outside the club meet with the students and hold discussions and informal talks. The students themselves are given a chance in the second term to present their views on subjects in which they are particularly interested.

## THE DEVELOPMENT OF THE DAIRY HERD

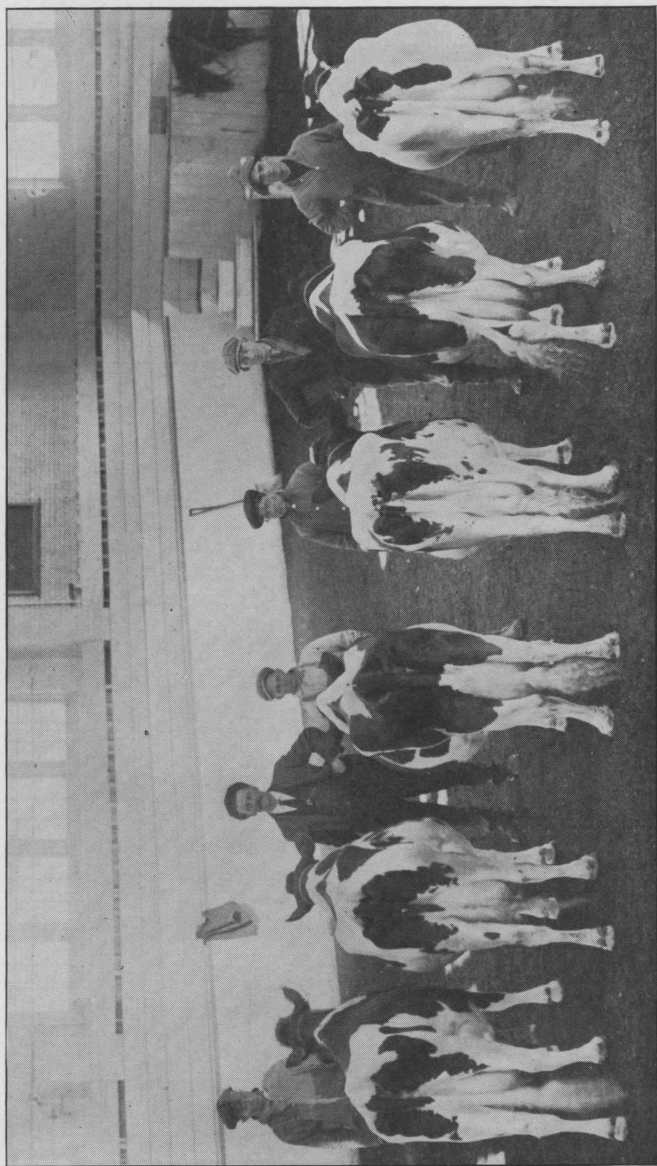
In the early days of the College the dairy herd consisted entirely of grade or scrub cows. No particular effort was made to improve them until Professor I. P. Roberts became head of the Department of Agriculture in 1874.

At this time practically the only improved breed of cattle in this country was the Shorthorn. Ezra Cornell, the founder of Cornell University, for many years maintained one of the best purebred herds of Shorthorns in the United States.

Professor Roberts was much dissatisfied with the character of the college herd which consisted of ten or twelve inferior cows. He foresaw the opportunities for improvement by using purebred bulls on these poor cows and selecting the best of the offspring to use in building up the herd. Two of the descendants of the grade cows which Professor Roberts bred are still in the herd and it is proposed to keep about this number of these grade animals or their descendants in honor of Professor Roberts and his efforts in improving the herd.

Mr. W. W. Chenery of Belmont, Mass., was the first importer of Holstein-Friesian cattle into this country. In 1875 Professor Roberts purchased of him a Holstein bull, the Sixth Earl of Middlesex, No. 156.

At this time Holsteins were practically unknown in this country and Professor Roberts states that he nearly lost his job on account of his introduction of the black and white cattle into the college herd.



Six of the seven 30 lb. cows bred by Cornell University

As has already been stated, Mr. Cornell had a fine herd of Shorthorns and the governor of the state who was a son of Mr. Cornell, considered that the bringing of the Holstein cattle to the college in some way lessened the value of his father's holdings.

Considerable credit is due Professor Roberts for maintaining his faith in the Holsteins and sticking to his system of improvement in spite of considerable opposition. In 1878 Professor Roberts visited Holland and purchased a small herd of pure-bred Holsteins for Mr. Howard G. White of Syracuse. A few years later Professor Roberts purchased from Mr. White a heifer called Dena, a granddaughter of a cow brought over in this importation.

This heifer, Dena, was the beginning of the purebreds at the college. She did not prove to be a very good producer or a prolific breeder and six years later her only female descendant in the herd was a granddaughter called Glista, 7857.

Professor H. H. Wing had for some time been working with Professor Roberts, and in 1889 he assumed full charge of the herd. Soon after this, the Babcock test was invented and from that time on, complete records of both milk and butterfat were kept. In 1892 as near as could be determined from the somewhat incomplete records kept in the early days, the production of the herd had increased over 100% in about 17 years.

When Professor Wing took charge of the herd, the cow Glista was the only remaining purebred female. She was coarse of bone and a distinctly inferior individual. All the purebred Holsteins in the herd trace directly to her and bear the name Glista. The college herd is one of the few existing today that can trace directly to the original Chenery importation.

Since 1875 twelve Holstein sires have been used. Among the more important of these are Netherland Remus, 6276; Sir Beets De Kol, 21422; Earl Korn-dyke De Kol, 24954; Dutch Hengerveld Korndyke, 31155; Small Hopes Korndyke De Kol, 32260; and Woodcrest Pietje Ormsby, 54909.

Of these sires Earl Korndyke De Kol was outstandingly the best. He is credited with producing 64 A. R. O. daughters and 25 proven sons.

The present herd sire is Model King Segis Koningen, 131819. He is sired by a son of King Segis. His dam, Anne De Kol Koningen, has a seven day record of 30.91 pounds of butter and his grand dam a record of 31.43 pounds in seven days.

The development of the herd was somewhat slow at first, due in part to a large number of bulls being produced in proportion to the number of heifers. Until 1900 the grade cows were better producers than the purebreds. Since that time, the grades have all been disposed of except the two which are kept in honor of Professor Roberts.

The great improvement in production over the cow Glista, whose yearly production was about 188 pounds of fat and 3,000 pounds of milk, is shown by the records of her descendants, seven of which have records of over 30 pounds of butter in seven days and three with records of over 18,000 pounds of milk in one year.

The following are the best seven day records of the Glista family :

Glista Erica.....	28.320 pounds fat
Glista Coreva.....	27.264 pounds fat
Glista Ernestine.....	26.660 pounds fat

The best yearly records have been made by Glista Eglantine, 18,901 pounds milk and 714 pounds fat. Glista Draba 18,351.7 lbs. milk 620.5 lbs. fat.

Next in numbers and introduction into the herd were the Jerseys in 1885 when a few purebred cows were purchased. The first was a cow called Gem of Spring Brook, bred by W. H. Burnham, Groton, N. Y. A recent purchase consisted of five females in calf from Messrs. Ayer and McKinney. A large number of male calves have been born and several of the females were lost in an epidemic of pleuro-pneumonia several years ago so that the development of the herd has not been very rapid.

Five sires have been used, among them, Cornell Exile, a son of Exile of St. Lambert ; and Marvel's Pogis, a descendant of Emma's Pearl. The last bull used was Blue Belle Experimenter from the herd of Mr. Geo. Sisson, and descended from the imported cow Blue Belle. A young bull, Count Sayda's Cornell, 141773, purchased in dam from Ayer and McKinney,



is the present herd sire. His dam is Sayda's Meridale Annette, 323907 ; his sire is Sayda's Count 128597.

Guernseys were introduced in 1903. They have not been very prolific and development has been slow. The present herd sire is Rondy B of Edgewater, a bull loaned to the Department of Animal Husbandry by Mr. Benham, of Canandaigua, N. Y. His grand dam is Miranda of Mapleton with a four year average of 12,974.6 pounds of milk and 704.19 pounds fat. A sister of his dam has a record of 12,016.3 pounds of milk and 573.86 pounds fat in one year.

To satisfy the desire of many breeders for a dual purpose breed, milking Shorthorns were added in 1905. Three females were purchased from the herd of Innes and May and later a bull from the same herd. The animals in the present herd are mostly descendants from two bulls of Clay breeding and a cow called Lady Benton.

Attention is called to Lady Clay 3rd, a typical specimen of milking Shorthorns with a yearly record of 11,912.1 pounds of milk and 483.63 pounds fat. The present herd bull is her son, Royal Clay by Royal Oxford.

The latest animals introduced into the herd were the Ayrshires, in 1911, from an importation by Mr. F. S. Peer, of Ithaca, N. Y. Two of these imported animals, Straith Lady Laurie and Knockdon Paleface, are still in the herd. At present six Ayrshires are maintained in the milking herd.

The present milking herd consists of about sixty cows and heifers. In addition to these, about twenty head of young stock are kept at what is known as the Mitchell Farm owing to lack of room in the University barns.

Last year Mr. T. E. Mitchell & Son, of Albert, N. M. presented to the University two Hereford cows with their two heifer calves. This stock is of Anxiety 4th breeding. One of these cows had been rebred before she left the range, while the other was bred to Premier Donald owned by F. S. Lewis, Ashville, N. Y. These cows form a nucleus from which it is hoped that a small breeding herd of Herefords may be developed to be used in the study of breeds.



## HORSES

The Department of Animal Husbandry owns and manages at present about seventy-five head of horses. All of these except part of the colts, are kept in the main horse barn which is located just beyond the judging pavilion.

This number includes two stallions, four mature road horses, fifteen teams of work horses, one team of mules, twenty-nine colts, which were born and raised on the University farm, and nine colts which were purchased from farmers near Ithaca. Four of the colts raised by the University and eight of the colts purchased are used in the horse training course given



Teams owned and used by the University

by the Department. Twenty of the work horses are mares of breeding age and from these the University has raised eleven colts during the past year.

One of the stallions, five of the work mares and seven of the University bred colts are registered Percherons, while the other stallion is a registered Hackney. The Hackney stallion, Volunteer, was presented to the University in 1910 by the Hon. F. C. Stevens of Attica, N. Y. He is considered to be one of the best bred Hackney stallions in this country at

the present time. Jantier, the gray Percheron stallion was imported from France by the University in 1912. Some of his offspring can be seen in the ring of purebred Percheron two-year-olds at the Farmers' Week Show on Thursday afternoon.

The business of raising colts has become of such importance that a special farm known as Cascadilla Farm, which consists of 150 acres of land, has been set aside for this purpose. This farm which is located about two miles southeast of the main barns, was purchased by the University three years ago. A year ago last spring it was turned over to the Department of Animal Husbandry to be used for breeding and raising colts. It is planned to seed the whole farm to permanent pasture and use it solely for keeping colts. It is aimed in this way to raise enough colts to replenish the teams used on the farm. This plan has so far been successful, as no work horses have been purchased by the University during the past three years, and this year it was not necessary to buy all the colts used in the horse training course as has been done heretofore.

The mature work horses kept by the Department are used to work on the farm and to haul coal and freight for the University. All of the horses, however, are at the disposal of the Department for use in instruction or experimentation at any time.

## SHEEP

The relative importance of Sheep Husbandry at Cornell is increasing. The purebred stock consists of 50 Shropshires, 27 Rambouillets, and 12 Dorsets. Besides these, there is kept a flock of about 60 grade ewes. The foundation of this flock was made up of Southdowns, Cheviots, Hampshires, Delaines and Dorsets.

During the last few years this flock has been kept almost entirely for the production of hothouse lambs. In order to command the highest prices, lambs must be dropped before the usual season of lambing begins. The hothouse lamb flock is maintained by rearing the ewe lambs which are dropped earliest in the season.



Ewe and Triplets

Thus, it is hoped that ewes can be developed which will consistently drop early lambs.

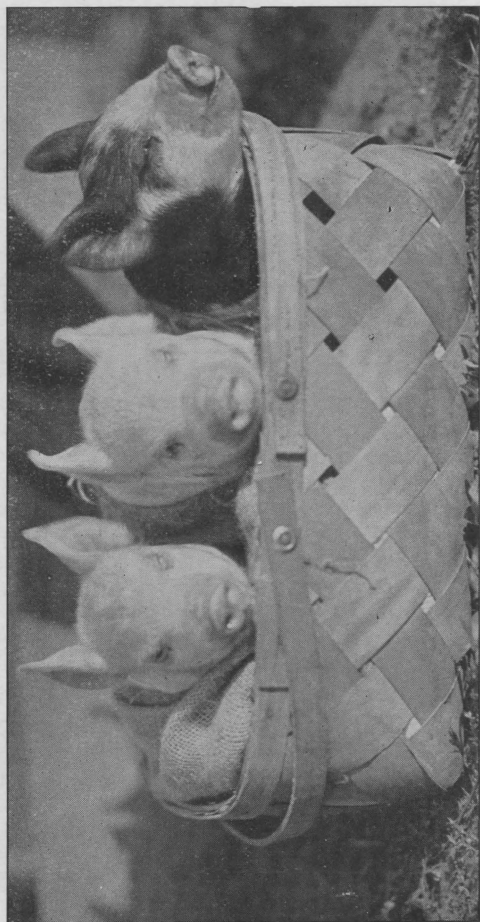
When the new sheep barn, now under construction, is completed, the showing of sheep at the Students' Livestock Show will be greatly facilitated. It is expected that sheep will then occupy the prominent place which belongs to them.

### SWINE

The Department of Animal Husbandry has for several years paid particular attention to the development of the Cheshire hog.

The foundation sow, Co-ed, 3154, together with a boar named John H., 1350, the first animals of this breed to be owned by the College, were purchased in 1903 of R. D. Button of Canastota, N. Y. All of the present herd which numbers about 100 are descended from Co-ed. Of the later boars purchased, chiefly from the New York State Breeders, one called the White Chief bred by S. G. Otis, Sherwood, N. Y., probably left the most important impress upon his progeny.

The White Chief was a great show animal as well as a good herd header for he won the grand championship at the New York State Fair in 1906 and again in



By courtesy Cornell Countryman

1908. He sired many prize winners, his offspring taking fifty-seven prizes at the New York State Fair from 1908 to 1911.

The herd has maintained an economical production of meat and this fact together with early maturity, fertility, and desirable conformation, has won for the Cheshire a prominent position in the swine breeding of New York State.

## ANIMAL HUSBANDRY EXHIBITS AND DEMONSTRATIONS

In order to present in as graphic and interesting a manner as possible the work of the Department, two rooms on the second floor and one room in the basement of the Animal Husbandry Building have been equipped with exhibits and demonstrations pertaining to Animal Husbandry. Each day from 8:30 to 10:30 A. M. a member of the Department or a member of the Round-Up Club committee will be present to answer questions and explain the charts and the exhibits.

### BREEDING CHARTS, LITERATURE, AND EQUIPMENT

Charts will be shown in Room 21 on the second floor of this building explaining the breeding of the Glista family. These charts clearly illustrate the development and improvement of the college herd by the use of purebred sires of good individuality and breeding. It is by this means that the college has developed from a poor cow, Glista, a herd of Holsteins which now contains six cows with records above thirty pounds of butter in a week.

All the bulletins, circulars and reading courses of the college which deal with topics relative to Animal Husbandry will be available for free distribution.

On the third floor of the Animal Husbandry Building has been arranged an exhibit of harness and bits of various kinds and of other equipment useful and essential to the horseman.

### AVAILABLE READING COURSE LESSONS IN ANIMAL HUSBANDRY

Residents of New York State may obtain the following reading course lessons, free of charge, either by applying in person at the Mailing Room in the basement of Roberts Hall, or by addressing the Cornell Reading Course for the Farm, College of Agriculture, Ithaca, New York.

## LIVESTOCK

- No. 114.—Silos and the Production and Feeding of Silage.
- No. 115.—Keeping Sheep for Profit.
- No. 117.—Computing Rations for Farm Animals.

## DAIRYING

- No. 86.—The Production of Clean Milk.
- No. 102.—Cooling Milk.
- No. 82.—Cream Separation.
- No. 32.—Composition of Milk and Some of Its Products.
- No. 60.—Farm Butter-Making.
- No. 98.—Practical Examples in Dairy Arithmetic.

## THE HORSE

- No. 46.—Feeding and Care of the Horse.
- No. 56.—Practical Horse Breeding.
- No. 113.—Judging Draft Horses.

## EXHIBITS OF FEEDS AND RATIONS

Altho breeding plays a most important part in the improvement of livestock, yet the highest results can not be obtained unless careful attention is given to feeding. For this reason, an exhibit of feeds should be of value to persons interested in Animal Husbandry problems.

The feed exhibits are shown in two adjoining rooms, C and 21, on the second floor of the Animal Husbandry Building. In room C are shown samples of all the feeds commonly used for feeding the larger farm animals, and a card which indicates how these feeds may be combined to make up desirable rations for dairy cattle, is available to everyone. The grain mixtures now in use at the college for feeding the horses, dairy cows, sheep, swine, young stock and bulls are shown. Several of these grain mixtures are also given on the following pages. A picture of Segis Fayne Johanna, the new world's record cow for butter production in seven days, being the first fifty pound cow—50.68 pounds—and the ration which she received are also shown. In Room 21 is arranged an exhibit of some of the principal grains and their by-products.



## GRAIN MIXTURES

All costs for the following grain mixtures are based on current prices, January 6th, 1917.

*Cows.*—Grain mixtures for dairy cows are not standard affairs but should be changed from time to time so as to get the best results for the money invested. The constituents of such mixtures will vary with the price of grains. The one used at present for the college dairy herd is as follows :

600 lbs. hominy	@ \$44.25 per ton	\$13.28
400 " gluten	@ 41.00 per ton	8.20
400 " wheat feed	@ 35.00 per ton	7.00
400 " Ajax flakes	@ 43.00 per ton	8.60
200 " ground oats	@ 42.40 per ton	4.24
2000 lbs. of the mixture costs		\$41.32
100 " of the mixture costs		\$ 2.07

*Dry Stock and Bulls.*—The mixture fed to the dry stock and bulls is one which is used quite universally by the best breeders of purebred cattle in this state. This is a standard mixture and probably need not be changed to fit fluctuating prices.

600 lbs. wheat bran	@ \$34.00 per ton	\$10.20
600 " hominy feed	@ 44.25 per ton	13.28
600 " ground oats	@ 42.40 per ton	12.72
200 " oil meal (old process)	@ 50.00 per ton	5.00
2000 lbs. of the mixture costs		\$41.20
100 " of the mixture costs		\$ 2.06

*Calves.*—In a state like New York where so much milk is marketed as a whole product, the question of calf feeding becomes a real problem. Many persons and companies have sought to meet this problem by feeding special grain mixtures to young calves. There are quite a number of these mixtures on the market and on the whole, they are probably very good. They are quite expensive however. These mixtures would cost at least \$60.00 per ton. The farmer can mix such a feed as the Purdue mixture for himself as follows :

500 lbs. blood meal	@ \$60.00 per ton	\$15.00
500 " hominy feed	@ 44.25 per ton	11.06
500 " red dog flour	@ 49.00 per ton	12.25
500 " oil meal (old process)	@ 50.00 per ton	12.50
2000 lbs. of the mixture costs		\$50.81
100 " of the mixture costs		\$ 2.54

*Horses.*—An experiment is now being carried on at



the college to determine, if possible, the relative value of different feeds for horses. Two mixtures are being used, one horse of each team receiving one mixture, the other horse the second mixture. The experiment is not completed and no results can be given as yet. The two mixtures used are as follows :

1000 lbs. hominy feed	@ \$44.25 per ton	\$22.12
1000 " wheat feed	@ 35.00 " "	17.50
		<hr/>
2000 lbs. of the mixture costs		\$39.62
100 " of the mixture costs		\$ 1.98
1000 lbs. corn meal	@ \$44.10 per ton	\$22.05
1000 lbs. wheat feed	@ 35.00 " "	17.50
		<hr/>
2000 lbs. of the mixture costs		\$39.55
100 lbs. of mixture costs		1.98

The colts, brood mares, and stallions are fed another mixture as follows :

800 lbs. corn meal	@ \$44.10 per ton	\$17.64
700 lbs. ground oats	@ 42.40 " "	14.84
300 lbs. wheat bran	@ 34.00 " "	5.10
200 lbs. oil meal (old process)	@ 50.00 " "	5.00
		<hr/>
2000 lbs. of the mixture costs		\$42.58
100 lbs. of the mixture costs		2.13

*Sheep.*—The best results seem to be obtained at the college by feeding the ewes with lambs and the young lambs the dry stock mixture given above. All the large lambs and the growing or fattening sheep are fed the following mixture :

750 lbs. whole oats	@ \$43.91 per ton	\$16.47
500 lbs. wheat bran	@ 34.00 " "	8.50
500 lbs. cracked corn	@ 44.80 " "	11.20
250 lbs. oil meal (old process)	@ 50.00 " "	6.25
		<hr/>
2000 lbs. of the mixture costs		\$42.42
100 lbs. of the mixture costs		2.12

*Swine.*—The mixture fed to swine at the college is given below. For growing animals the middlings should be increased while for the fattening animals more hominy should be added.

900 lbs. standard wheat middlings		
@ \$35.00 per ton		\$15.75
900 lbs. hominy feed	@ 44.25 per ton	19.91
200 lbs. tankage	@ 60.00 " "	6.00
		<hr/>
2000 lbs. of the mixture costs		\$41.66
100 lbs. of the mixture costs		2.08

## CALF FEEDING EXPERIMENT

One of the difficult problems that confronts the farmer and the stock raiser is how to best and most economically develop the calf during the first six months of its life and fit it for the greatest usefulness as a breeding or feeding animal. A continued study along this line is being made this winter here at the college.

In this project there are two groups of calves—a skim milk fed group and a home mixed calf meal fed group. The skim milk fed group is being fed as follows: The calf is allowed to suckle the dam two days, then put on whole milk. After about three weeks it is gradually changed to skim milk, taking, generally, a week for the change.

The home mixed calf meal fed group is being fed as follows: allow the calf to suckle the dam two days, then put him on whole milk. After a week the calf meal is gradually added to the ration and at the same time the milk fed is gradually diminished until at the age of five weeks the calf is receiving only the meal. If the calf does not do well on the meal, it is put back on milk until it has improved.

All milk is fed at the temperature of 100° F. or blood heat. The home mixed meal is mixed with water at the temperature of 100° F. at the time of feeding in the ratio of one pound of meal to eight pounds of water.

As soon as the calves will take it, they are given clover hay and a grain mixture consisting of the following: 3 parts bran, 3 parts hominy feed, 3 parts oats, and 1 part oil cake. They are given access to all the hay that they will consume while only what grain they will clean up is given to them at each meal.

For details as to how the calves are doing on this mixture consult the person in charge of the feed exhibit in Room C or Room 21 of the Animal Husbandry Building.

## THE DIVISION OF MEATS

At the beginning of the Fall Term in 1914 a course in Meats and Meat Products was inaugurated in the Department of Animal Husbandry, and since then about fifty students have taken the work each term. The object of the work is to teach the student how to

slaughter, dress, and cut up cattle, sheep and swine, both for the market and for home use. He is taught how to cure meats and make the more common kind of domestic and foreign sausages.

The farm fresh meat problem is studied from the farm standpoint, and the student is given opportunity to do research work along this line.

All the work is done by the student, for only by doing the work can he really learn and become proficient. In order to carry on the work to the best advantage, it is necessary to kill a large number of animals, the meat of which is sold to the members of the college community, thus enabling the student to learn how to make the retail as well as wholesale cuts.

The equipment of the laboratories is very complete, in fact unsurpassed by any of the other colleges of the country, and while more expensive and elaborate than that used on the farm, at the same time it is in keeping with the large amount of live stock slaughtered and fresh and cured meats produced. The practical farm phase of the work is emphasized thruout the course and the student is taught how to carry on the work under ordinary farm conditions, at a minimum expense for tools, equipment and labor.

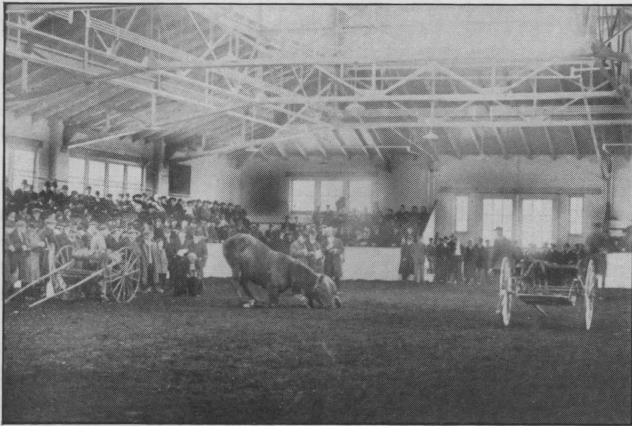
A new phase of the work is a required trip of inspection. The class is taken on a two day trip to Buffalo where the livestock market is studied together with methods of handling, marketing and storing of animals, meat and meat products. The stock yards, packing plants, storage plants and tanneries are visited by the students under the guidance of the instructor, and the various processes are explained by guides furnished by the companies. Talks are given by members of commission merchants, buyers, market men and meat inspectors.

During Farmers' Week cutting demonstrations will be held with beef, pork, and lamb. An exhibit of fresh and cured meats prepared by the students will be on display in the cutting laboratory of the Division of Meats on Monday, Tuesday, Wednesday and Thursday of that week. One of the round table discussions held during the afternoons will be on meat on the farm both from the farmer and housewife's standpoint. Students taking this course, and members of the Department will answer questions at all times.

## HORSE TRAINING DEMONSTRATION

TUESDAY, 2 P. M., JUDGING PAVILION

For a number of years the Animal Husbandry Department felt the need of giving the students more actual work with horses. The college has often been criticized in that it teaches a great deal of theory but does not give enough actual work with plants and animals to sufficiently develop the practical side of education. This criticism has been valid to a certain ex-



Participating in the Horse Training Demonstration

tent but the Department was formerly prevented by lack of facilities from giving as much practical work as was desired. After the new horse barn was constructed six years ago, a course in Practical Horse Training was established. This course was a success from the start and has been given every year since. As there is room in the barns for only a certain number of colts, the registration in this course has had to be limited. This year twelve students are taking the course.

In previous years all of the colts used in this horse training course were purchased by the University from farmers near Ithaca. This year, however, only eight colts were bought and four colts raised by the Univer-

sity were added to make up the desired number. At the beginning of the term an instructor placed a price upon each colt which represented approximately the value of the colt at that time. Each student then placed the colts in the order in which he would buy them at that price. As nearly as possible each student was assigned the colt to train which he placed first. All of these colts will be sold at the Annual Farmers' Week Sale, Friday afternoon, February 16th, and the student whose colt sells for the highest price above that placed upon it at the beginning of the term will receive a medal.

On Tuesday afternoon these colts will be shown in a training demonstration in the Judging Pavilion. The students have been preparing for this demonstration for several months, and many of the colts have been taught to do several tricks as well as having been trained for riding and driving. This training demonstration is in the form of a competition and capable judges will decide which animal they consider to be the best trained and a medal will be awarded to his trainer.

## FARMERS' JUDGING CONTEST

WEDNESDAY, 3 P. M.

One of the established events of Farmers' Week is a cow judging contest held in the Animal Husbandry Pavilion on Wednesday afternoon. This contest is open to all farmers and in the past much interest has been shown by contestants and audience.

A farmer gets an opportunity in this contest to test his ability to correlate conformation and production. Ten cows, representatives of the leading dairy breeds, are placed in the ring. Persons entering the contest are expected to place the ten animals in the order of their ability to produce as measured by their best yearly record.

The correct placing will be written on the cards turned in by the contestants, the contestant's grade calculated on the basis of 100, and the card returned by mail, so that each farmer entering the contest learns just how successful he was in his placing.

Many farmers have entered this contest each year; often two years in succession. Suitable prizes will be awarded to those who win places.



The Livestock Parade during Farmers' Week

## THE LIVESTOCK PARADE

THURSDAY, FEBRUARY 15, 11-11:30, IN FRONT OF  
ROBERTS HALL

(In case of bad weather in the Judging Pavilion)  
University barns to Roberts Hall and return.

The Livestock parade has proved to be a valuable part of the livestock show. Everyone should make a special effort to see this part of the Farmers' Week program, as it is the best opportunity of seeing the horses and cattle together at one time.

## ORDER OF PARADE

### HORSES

<i>No.</i>	<i>Name</i>	<i>Breed</i>	<i>Age</i>	<i>Weight</i>	<i>Driver</i>
1	Volunteer	Reg. Hackney	8	1255	G. W. Tailby
2	Marie	Roadster	12	1360	J. Westbrook
3	Jantier	Reg. Percheron	7	1690	A. Snook
4	Nemo	"	4	1395	Wm. Overbaugh
	Nix	Grade "	4	1410	
5	MacGregor	" Draft	13	1430	I. J. Potter
	MacDougal	"	13	1455	
6	Mac	"	12	1510	J. Kimball
	Sam	"	12	1585	



7	Signorina	Reg. Percheron	5	1210	P. Leonard
	Signorae	" "	10	1500	
8	Lady	" "	5	1240	R. Dennis
	Jennie	" "	4	1395	
9	May	Grade	7	1275	Leon Archer
	Pomona	Reg.	6	1480	
10	Brenda	" "	4	1530	B. A. Jennings
	Cora	Grade	6	1300	
11	Nero	Reg.	5	1315	E. J. Ballard
	Karen	Grade	4	1380	
12	Jasper	" "	4	1265	E. E. Bradley
	Peter	" "	4	1345	
13	Bess	" Draft	14	1220	O. Cornelius
	Jess	" "	15	1310	
14	Orpha	" Percheron	5	1245	P. Allenson
	Prince	" Draft	16	1305	
15	Maud	" Percheron	8	1415	R. Evans
	Mildred	" Hackney	4	1385	
16	Bertha	" Percheron	4	1215	C. Morenus
	Belle	" "	6	1270	
17	Stella	" Draft	13	1200	L. Dunn
	Star	" "	14	1180	
18	Bird	" Percheron	8	1140	F. W. Woodward
	Doll	" "	9	1205	
19	Kate	Draft Mule	11	1260	L. Miller
	Topsy	" "	11	1220	
20	Polly	" "	10	1150	E. Dennis
	Jinnie	" "	10	1220	
<i>Trainer</i>					
21	Pete	Grade Percheron	5	1370	A. R. Tinnerholm
	Ned	" "	5	1360	E. H. Smith
22	Tip	" "	4	1275	I. H. Doetsch
	Topsy	" "	4	1300	D. U. Dunham
23	Vice	Grade Hackney	4	1160	W. R. Whittingham
	Victor	" "	4	1165	P. B. Woodford
24	Pat	Grade Draft	4	1180	J. W. Bolgiano
	Lou	" "	4	1150	F. C. Bliss
25	Jill	Grade Percheron	3	1065	
	Jane	" "	4	1360	G. L. Dawson
26	Cricket	" Standardbred	3	1080	Miss H. F. Bell
	Marion	" "	3	1030	E. A. Jones
27	Jimmie	" Hackney	3	975	L. C. Warner
	Vevie	" "	5	1120	
<i>Exhibitor</i>					
28	Marguerite	Reg. Percheron	3	1325	I. H. Wheat
29	Mary	Grade	3	1310	R. F. Fricke
30	John	" "	3	1255	L. C. Warner
31	Betty	" "	3	1080	I. H. Doetsch
32	Jonah	Reg.	2	1050	E. J. Ryan, jr.
33	Jude	" "	2	1180	J. C. Maner
34	Sylvia	" "	2	1045	M. A. Koehler
35	Carrie	Grade	2	1185	W. L. Stone
36	Beauty	" "	2	1215	G. R. Andrews
37	Nate	" "	2	960	R. S. Leathersick
38	Valentine	" Hackney	2	930	A. R. Tinnerholm



39	Pauline	Reg. Percheron	I	755	C. T. Bridges
40	Molly	Grade	"	I 685	W. Maier
41	Josh	"	"	I 690	W. R. Whittingham
42	Jerry	"	"	I 770	J. C. Loope
43	Clover	"	"	9 mos. 690	S. R. Farley
44	Joy	"	"	10 mos. 670	H. H. Wedge
45	Jim	"	"	8 mos. 545	G. H. Howard
46	Maggie	" Hackney	11 mos.	605	G. C. Fear

## DAIRY CATTLE

	<i>Name</i>	<i>Breed</i>	<i>Exhibitor</i>
47	Sir Tidy Glista	Holstein	H. Coombes
48	Choice Model Glista	"	J. M. Beiermeister
49	Earl David Glista	"	N. C. Brown
50	Model Darias Glista	"	H. Regnault
51	Model Daniel Glista	"	H. A. Titsink
52	Glista Ernestine	"	R. E. Stocker
54	Glista Coreva	"	L. H. Skillman
53	Glista Fontaine	"	A. S. Myers
54	Glista. Draba	"	W. R. Evans
55	Glista Eudora	"	D. C. Hitchcock
56	Baron Ayer of Sand Hill	Ayrshire	Geo. Brown
57	Straith Lady Laurie	"	H. A. Titsink
58	Knockdon Paleface	"	L. H. Skillman
59	Paleface Ailsa	"	F. Masso
70	Blanche Blue	"	C. L. Anderson
62	Blanche Netherton	"	W. R. Buel
63	Rondy B of Edgewater	Guernsey	W. Berich
64	Uneeda France	"	H. B. Gifford
65	Glenwood Queen of Maplehurst	"	W. R. Buel
66	Mota Warwick	"	L. N. Mitchell
67	Triple May	"	G. R. Andrews
68	Mota Ledyard	"	C. A. Thompson
69	Count Saydas' Cornell	Jersey	H. Eaton
70	Garnet Mu	"	H. S. Brower
71	Eminent's Sultane Belle	"	E. Smith
72	Ina Rosaire	"	C. E. Graves
73	Berta Boon	"	J. O. Banker
74	Berta Rosaire	"	O. N. Eaton
75	Royal Oxford	Shorthorn	W. Alford
76	Lady Clay 2d	"	M. L. Bridges
77	Lady Clay 3d	"	H. L. Creal
78	Lady Clay 4th	"	R. G. Bookmiller
79	Lady Clay 5th	"	R. E. Stocker
80	Lady Clay 7th	"	J. B. Lippert
81	Fat Steer	Angus	L. S. Huntington
<i>Name of Dam</i>			
82	Glista Fairy	Holstein	K. T. Allan
83	Glista Dahlia	"	L. J. Stone
84	Glista Fontaine	"	C. A. Thompson
85	Glista Godiva	"	W. I. Roe
86	Glista Esmeralda	"	M. A. Koehler

## STUDENTS' LIVESTOCK SHOW

Persons interested in livestock have come to regard the livestock show as an essential feature of the Animal Husbandry activities during Farmers' Week. This show gives many regular students a chance to do something for their Alma Mater and also to obtain valuable experience both in fitting and showing animals. It also gives Short Course students an opportunity to engage in University activities.

Gold medals will be awarded to those students who win first prize in their respective rings. All other participants will receive ribbons.

Owing to a lack of barn room sheep cannot be shown. Later it is hoped that both sheep and swine may be shown. However, the large number of horses and cattle available for show purposes furnish ample opportunity for all those who wish to show stock.

The animals are drawn by lot and rings made up as nearly uniform as possible. Two capable judges will award the prizes in all classes. One will judge the animals on their merits and the other will pay attention to the conduct of the man in the ring and the fitting which the animals have received. The grand championships of the horses and of the cattle will be chosen from the first prize animals in each ring, the two winners each receiving a grand championship rosette.

Farmers' Week visitors are assured of a good show, of seeing the University stock at their best and of observing capable judges place rings. They can also see that the students are interested in practical work. No more comfortable place than the new Judging Pavilion could be found for holding the show.



# CLASSES AND ENTRIES IN STUDENTS' LIVESTOCK SHOW

## DAIRY CATTLE

*Coaches*  
PROFESSOR H. H. WING  
MR. G. W. TAILBY, JR.  
MR. C. L. ALLEN

*Judge*  
PROFESSOR J. C. McNUTT

### Class 1—Holstein Bulls

<i>No.</i>	<i>Name</i>	<i>Age</i>	<i>Exhibitor</i>
1	Choice Model Glista	1	J. M. Beiermeister
2	Earl David Glista	1	N. C. Brown
3	Model Darias Glista	1	H. Regnault
4	Model Daniel Glista	1	H. A. Titsink

### Class II—Holstein Cows

5	Glista Ernestine	8	R. E. Stocker
6	" Coreva	8	L. H. Skillman
7	" Fontaine	4	A. S. Myers
8	" Draba	7	W. R. Evans
9	" Eudora	6	D. C. Hitchcock

### Class III—Holstein Calves

#### *Name of Dam*

10	Glista Fairy	6 mo's	K. T. Allan
11	" Dahlia	6 "	L. J. Stone
12	" Fontaine	6 "	C. A. Thompson
13	" Godiva	7 "	W. I. Roe
14	" Esmeralda	5 "	M. A. Koehler

### Class IV—Ayrshire Cows

15	Sraith Lady Laurie	7	H. A. Titsink
16	Knockdon Paleface	7	L. H. Skillman
17	Paleface Ailsa	3	F. Masso
18	Blanche Blue	3	C. L. Anderson
19	Blanche Netherton	5	W. R. Buel

### Class V—Guernsey Cows

20	Uneeda France	15	H. B. Gifford
21	Glenwood Queen of Maplehurst	10	W. R. Buel
22	Mota Warwick	3	L. N. Mitchell
23	Triple May	6	G. R. Andrews
24	Mota Ledyard	4	C. A. Thompson

### Class VI—Jersey Cows

25	Garnet Mu	3	H. S. Brower
26	Eminent's Sultane Belle	6	E. Smith
27	Ina Rosaire	4	C. E. Graves
28	Berta Boon	5	J. O. Banker
29	Berta Rosaire	4	O. N. Eaton

### Class VII—Shorthorn Cows

30	Lady Clay	2d	8	M. L. Bridges
31	"	"	8	H. L. Creal
32	"	3d	7	R. G. Bookmiller
33	"	4th	5	R. E. Stocker
34	"	5th	4	J. B. Lippert
	"	7th		

### Class VIII—Grand Champion Cattle

Composed of winners of foregoing classes.

## HORSES

#### *Coaches*

Prof. M. W. HARPER  
Mr. E. S. HAM

#### *Judge*

PROFESSOR J. C. McNUTT

### Class IX—Three-Year-Olds

<i>No.</i>	<i>Name</i>	<i>Weight</i>	<i>Student Exhibitor</i>
35	Marguerite	1325	I. H. Wheat
36	Mary	1310	R. F. Fricke
37	John	1255	L. C. Warner
38	Betty	1080	I. H. Doetsch

### Class X—Registered Percheron Two-Year-Olds

39	Jonah	1050	E. J. Ryan, jr.
40	Jude	1180	J. C. Maner
41	Sylvia	1045	M. A. Koehler

### Class XI—Grade Two-Year-Olds.

42	Carrie	1185	W. L. Stone
43	Beauty	1215	G. R. Andrews
44	Nate	960	R. S. Leathersick
45	Valentine	930	A. R. Tinnerholm

### Class XII—Yearlings

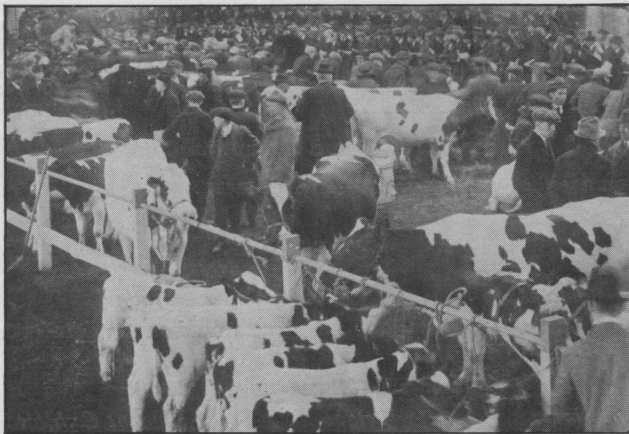
46	Pauline	755	C. T. Bridges
47	Molly	685	W. Maier
48	Josh	690	W. R. Whittingham
49	Jerry	770	J. C. Loope

### Class XIII—Colts Nearly One Year

50	Clover	690	S. R. Farley
51	Joy	670	H. H. Wedge
52	Jim	545	
53	Maggie	605	G. C. Fear

### Class XIV—Grand Champion Horses

Winners of Classes IX-XIII, Inclusive.



## ANNUAL SALE OF SURPLUS STOCK (HORSES, CATTLE, SHEEP AND SWINE)

FRIDAY, FEBRUARY 16, 2 P. M.

The annual sale of the surplus livestock of the Department of Animal Husbandry has come to be recognized as one of the attractive features of Farmers' Week. As the stud, herds, and flocks are kept primarily for the purpose of instruction, great care and selection is exercised in their breeding. There are, each year, more produced than there is barn accommodations for, and it is this surplus which is sold at auction during Farmers' Week. The sale this year will take place on Friday at 2 P. M., in the Judging Pavilion where ample seating facilities are provided. It will consist of :

- 8 Holstein cows
- 8 Holstein bulls—four ready for service
- 14 Horses—mostly grade Percherons
- 11 Shropshire ewes
- 6 Cheshire sows

A catalog giving more detailed information may be obtained at the Animal Husbandry office.

**PROGRAM FOR WEEK**  
**DEPARTMENT OF ANIMAL HUSBANDRY**

**MONDAY, FEBRUARY 12**

- 10-11 A. M.—Productive Sheep Husbandry.—Prof.  
H. A. Hopper. Animal Husbandry Lecture  
room A.
- 11-12 A. M.—Horse Breeding.—Prof. M. W. Harper.  
Animal Husbandry Lecture Room A.
- 2- 3 P. M.—Building Cow Barns—Prof. H. W. Riley  
Animal Husbandry Lecture Room A.
- 3- 4 Raising Dairy Calves with Feed Demonstration  
—Prof. E. S. Savage. Animal Husbandry  
Lecture Room A.
- 7:30 P. M.—Round-Up Club Reception to Farmers'  
Week visitors. Animal Husbandry Conditions  
in the United States.—Prof. M. W. Harper.  
Animal Husbandry Lecture Room A.

**TUESDAY, FEBRUARY 13**

- 9-10 A. M.—Mendelism as a Factor in Animal Breed-  
ing.—DeVoe Meade.  
Animal Husbandry Lecture Room A.
- 10-11 A. M.—Cost of Raising a Colt.—Prof. M. W.  
Harper.  
Animal Husbandry Lecture Room A.
- 11-12 A. M.—Demonstration, Killing Horns on Calves  
—C. L. Allen.  
Livestock Judging Pavilion.  
Anatomy of the Horse's Foot.—Dr. Sunderville.  
Animal Husbandry Lecture Room A.
- 2 P. M.—Meat Cutting Demonstration, Pork and  
Mutton.—K. J. Seulke.  
Animal Husbandry Lecture Room A.  
Horse Training Demonstration and Students'  
Prize Competition.—Prof. M. W. Harper.  
Stock Judging Pavilion.  
A Plan of Stable Management.—Prof. C. H.  
Royce.  
Animal Husbandry Building Room E.

- 3 P. M.—Stable Arrangement.—Prof. C. A. Boutelle.  
Animal Husbandry Building Room E.

WEDNESDAY, FEBRUARY 14

- 9-10 A. M.—Cost of Milk Production.—Prof. H. A. Hopper.  
Animal Husbandry Lecture Room A.
- 10-11 A. M.—Feeding Dairy Cattle.—Prof. E. S. Savage.  
Animal Husbandry Lecture Room A.
- 11-12 A. M.—Dairy Herd Improvement.—Prof. H. H. Wing.  
Animal Husbandry Lecture Room A.
- 12- 1 P. M.—Milk Stations.—Mr. Ayers.  
Animal Husbandry Lecture Room A.
- 2 P. M.—Meat Cutting Demonstration, Beef.—K. J. Seulke.  
Animal Husbandry Lecture Room A.  
Feeding for Advanced Registry.—C. L. Allen.  
Animal Husbandry Building Room E.
- 3 P. M.—Farmers' Competitive Cow Judging Contest.—Prof. H. H. Wing.  
Livestock Judging Pavilion.
- 4 P. M.—Round Table Discussion—The Farmers' Meat Supply led by K. J. Seulke.  
Animal Husbandry Lecture Room A.  
Meat products prepared in class will be shown and an opportunity given to sample them.
- 8 P. M.—The Dairymen's League.—President R. D. Cooper, Roberts Assembly.  
Some Problems of the Dairyman.—Prof. G. F. Warren, Roberts Assembly.

THURSDAY, FEBRUARY 15.

- 9-10 A. M.—Ayrshires.—By Representative of Ayrshire Breeders' Association, Animal Husbandry Room A.
- 10-11 A. M.—Guernsey Cattle.—B. Hills, representing American Guernsey Cattle Club, Animal Husbandry Room A.
- 11-11:30 A. M.—Livestock Parade, in front of Roberts Hall. (In case of bad weather in the Judging Pavilion).



- 11:30-12:30 P. M.—Holstein Friesian Cattle.—C. A. Nelson, Waverly, Iowa. Representing Holstein Friesian Breeders' Association, Animal Husbandry Room A.
- 12:30 P. M.—Dairy Shorthorns.—Representative of American Shorthorn Breeders' Association, Animal Husbandry Room A.
- 2 P. M.—Students' Livestock Show and Competition.—Livestock Judging Pavilion.
- 3:30 P. M.—Jersey Cattle.—M. D. Munn or Wallace MacMounies, of American Jersey Cattle Club, Animal Husbandry Room A.

#### FRIDAY, FEBRUARY 16

- 9-10 A. M.—Diseases of New-born Calves.—Dr. W. L. Williams, Animal Husbandry Room A.
- 10-11 A. M.—Some of the Common Parasites of Domesticated Animals.—Dr. C. P. Fitch, Animal Husbandry Room A.
- 11-12 A. M.—Should the Farmer Raise his own Horses?—Prof. M. W. Harper, Animal Husbandry Room A.
- 2 P. M.—Regular Annual Public Sale of Surplus Livestock including horses, cattle, sheep and swine.—Livestock Judging Pavilion.

#### EXHIBITS

- Exhibits of Foods and Rations. Animal Husbandry Room C, 2nd Floor.
- Exhibits of Foods and their By-products. Animal Husbandry Room 21, 2d floor.
- Development of the College Herd. Illustrated by charts and photographs. Animal Husbandry Room 21, 2d floor.
- Exhibit of Harness and Bits. Animal Husbandry D, 3d floor.
- Exhibit of Farm Cured Meats and Meat Products. Meat Laboratory. Animal Husbandry Room 3 Basement.
- Babcock testing demonstration daily 9-10 by J. M. Beiermeister. Testing Laboratory Animal Husbandry Room 22.

## LUNCH COUNTER AND MISCELLANEOUS

The members of the Round-Up Club feel that they can give better service to the Farmers' Week guests this year because of their previous year's experience with a lunch counter. A substantial lunch may be had daily from 12 to 1:30 in the Animal Husbandry Building. Light lunch and refreshments may be obtained at all times during the day.

A rest room for ladies has been provided on the third floor of the Animal Husbandry Building. The men's cloak room is in the basement of the same building.

The Club desires to be of assistance to everyone who is interested in Animal Husbandry matters. It is hoped that the people will feel perfectly free to ask questions of the students and especially those students who wear either guide or committee ribbons.





